4 OPERATING INSTRUCTIONS

The information in this section will provide optimum equipment performance if followed carefully. It will not, however, compensate for failure to observe and understand the parameters of the sterilizing equipment process. Refer to Section 3 for proper Sterilization Techniques.

4.1 Before Operating The Equipment

1. Be sure that chamber drain strainer is clean and in place and that chamber interior is clean (para. 5.1).

2. Open the upper access door.

a. Be sure manual control is turned to OFF.

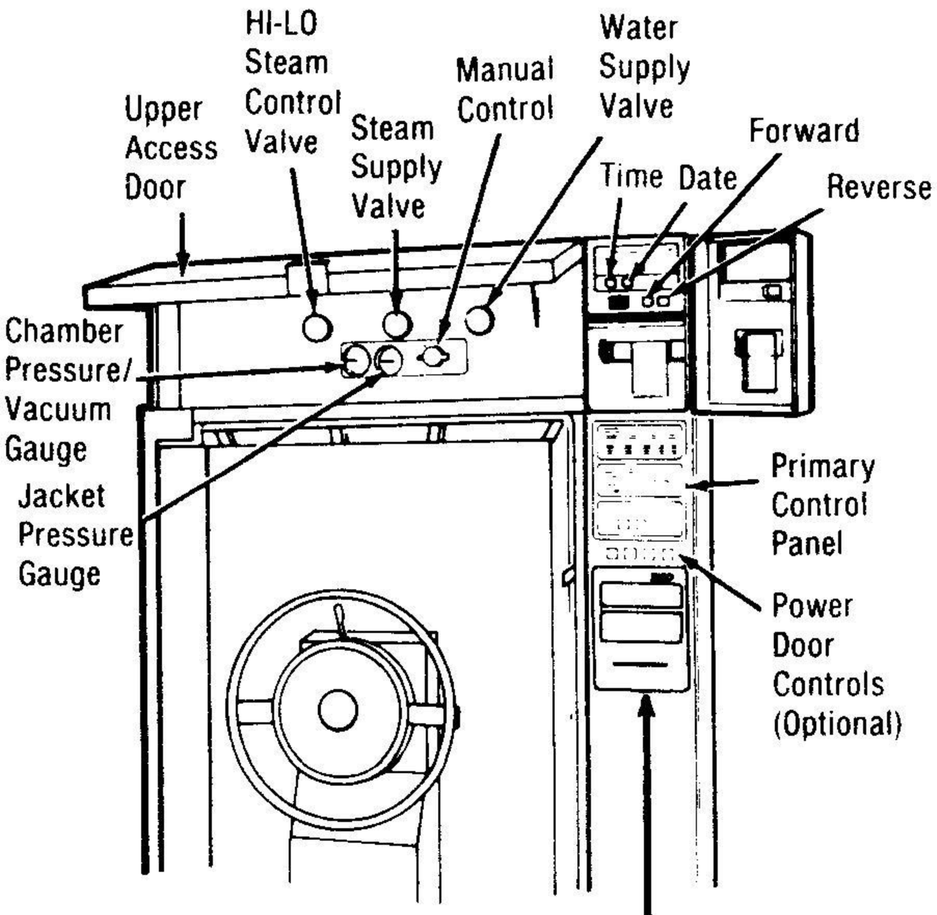
b. Turn STEAM and WATER valves to ON. Steam is admitted to jacket and will begin to warm chamber.

3. Open the door on the secondary control panel and position the POWER and CONTROL switches to ON. Primary control panel lights up and all LEDs on the Printcon display light momentarily for a lamp test to assure the operator that the system is functioning. The printer records the time and date that the power is turned ON.

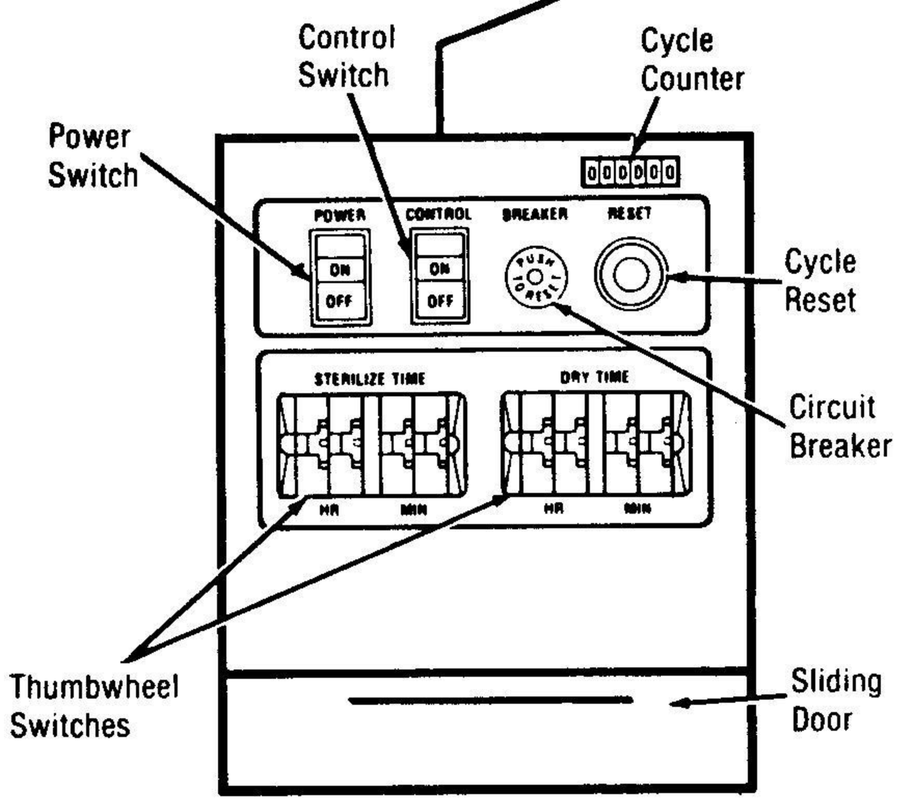
4. Check for correct time and date by pressing the "Time" or "Date" pushbutton. To change either, press the "Forward" or "Reverse" pushbutton until the correct time/date is displayed. If incorrect time and date are still displayed, check battery. See paragraph 7.3.5, "Changing the Battery," if replacement is necessary.

5. Check paper roll. A colored warning stripe will appear on the paper when the roll is near its end. A single ply roll lasts approximately two months and double ply rolls one month. See paragraph 7.3.1 "Changing Paper," if replacement is necessary.

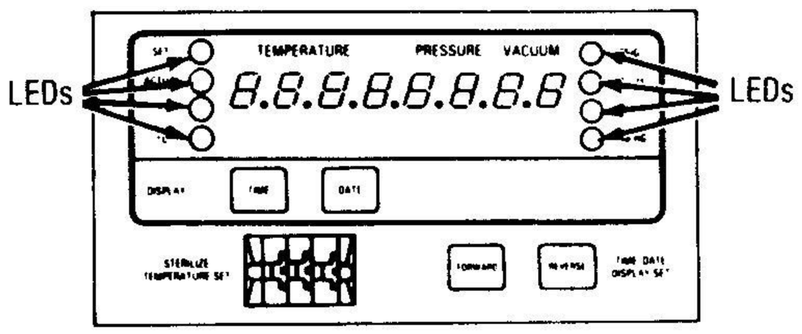
6. Check the printout to assure that the inked ribbon cartridge is providing adequate ink. A fresh cartridge should last approximately 3 to 4 months. See paragraph 7.3.4 "Changing The Inked Ribbon Cartridge," if replacement is necessary.



Upper Access Door.



Secondary Control Panel.



LED Displays.

NOTE: The visual display and printout of printer can optionally be set to indicate temperature in degrees Fahrenheit or Celsius and pressure can be either in English (PSI gauge and inches Hg vacuum) or metric (kg/cm² gauge and mm Hg). LEDs on display indicate which units are being displayed. The display of temperature and (English) pressure can be either single precision (no decimal) or extended precision (one decimal). Metric pressure shows one or two decimal places. Metric vacuum shows no decimal places. These adjustments must be made by a qualified service technician. See paragraph 7.4.2, "Changing Units of Display."

Unit is factory set so that the printout during STERILIZE phase only includes beginning time, temperature and pressure points. This can be changed, however, so that the printing of time, temperature and pressure can be done at continuous intervals throughout STERILIZE phase. The time of interval is adjustable in 30-second increments with a total range from 30 seconds to 49 minutes, 30 seconds. This adjustment **must be** made by a qualified service technician. See paragraph 7.3.6, "Changing Sterilize Printout Intervals."

7. Review paragraph 4.5, "Control Monitoring and Communication Systems," in order to identify the cause of any abnormal condition during a sterilization cycle.

8. If a double-door unit, review paragraph 4.6 to become familiar with the controls on the non-operating end.

9. Wait until jacket pressure has stabilized before starting a cycle.

10. Pressure display should read zero when the sterilizer door is open. If it does not, simply press the reset button on the secondary control panel.

4.2 Automatic Operation: Gravity Cycle

1. Follow instructions in paragraph 4.1, "Before Operating The Equipment."

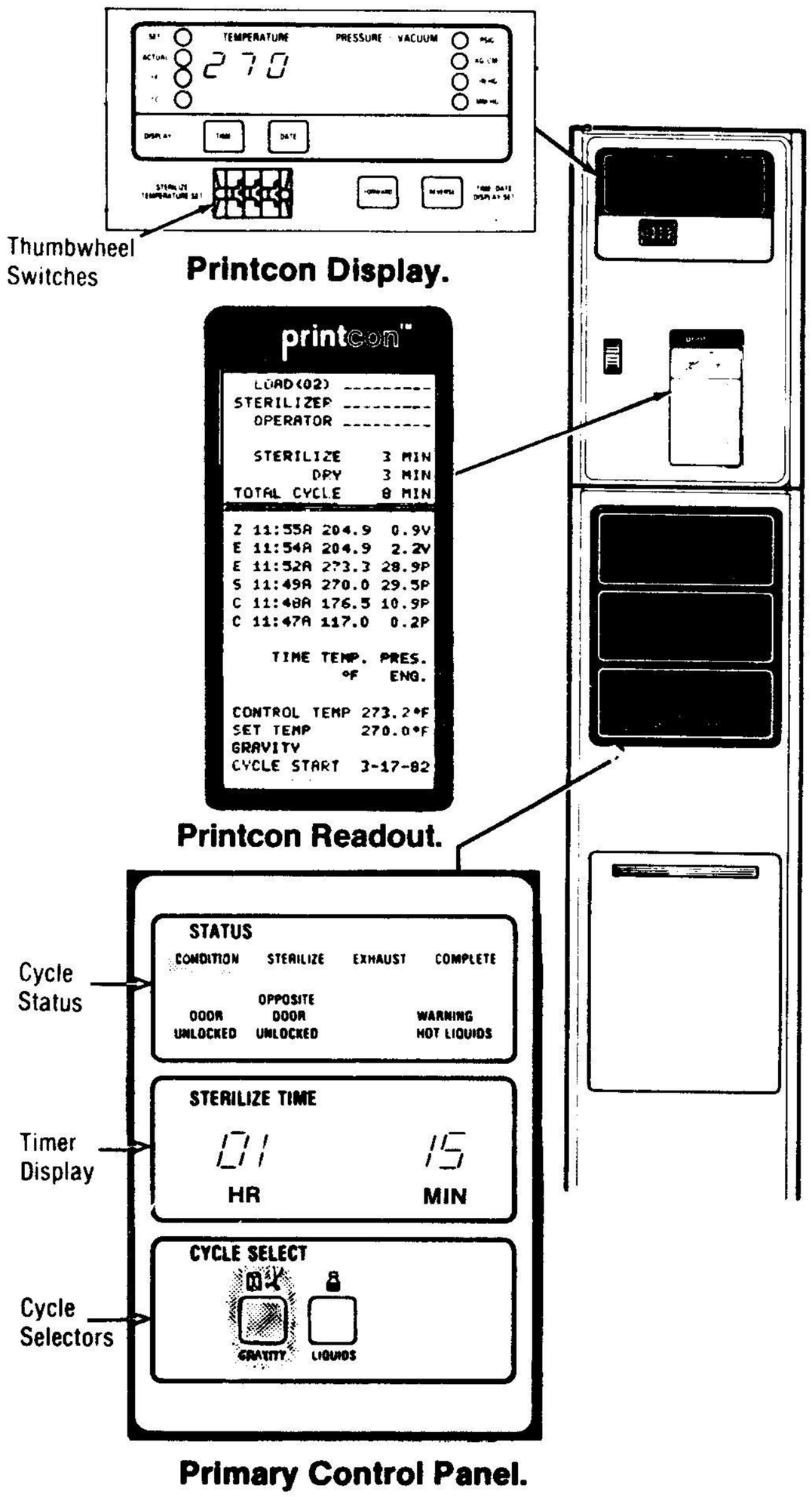
2. Refer to Table 4.1 and select the desired sterilizing temperature. Open the upper access door and turn HI-LO valve to HI for the 270 F (132 C) sterilizing cycle, or to LO for the 250 F (121 C) sterilizing cycle.

NOTE: For cycle temperatures below 250° F (121 C), refer to paragraph 4.7.

3. Open the door on the secondary control panel.

a. Be sure the POWER and CONTROL switches are ON. Primary control panel and Printcon display should be lit.

b. Dial the correct exposure period (Table 4.1) on STERILIZE TIME thumbwheel switches.



Printcon Display.

Printcon Readout.

Primary Control Panel.

c. Dial the desired drying time on the thumbwheel switches. This time will be displayed for 5 seconds on primary control panel. Following this 5 seconds, panel will return to sterilize time unless dry time is changed again. For wrapped goods, dry time can vary (usually between 5 and 20 minutes) depending on pack density, instrument tray weight, pack preparation technique including type of wrapping material used, and sterilizer loading procedures (refer to Section 3). For unwrapped goods, drying time is not required, however, a minimum of 02 minutes will eliminate excess steam vapors prior to opening chamber door. Set times are displayed on the primary control panel. Once the cycle is started, these times are locked in and cannot be changed.

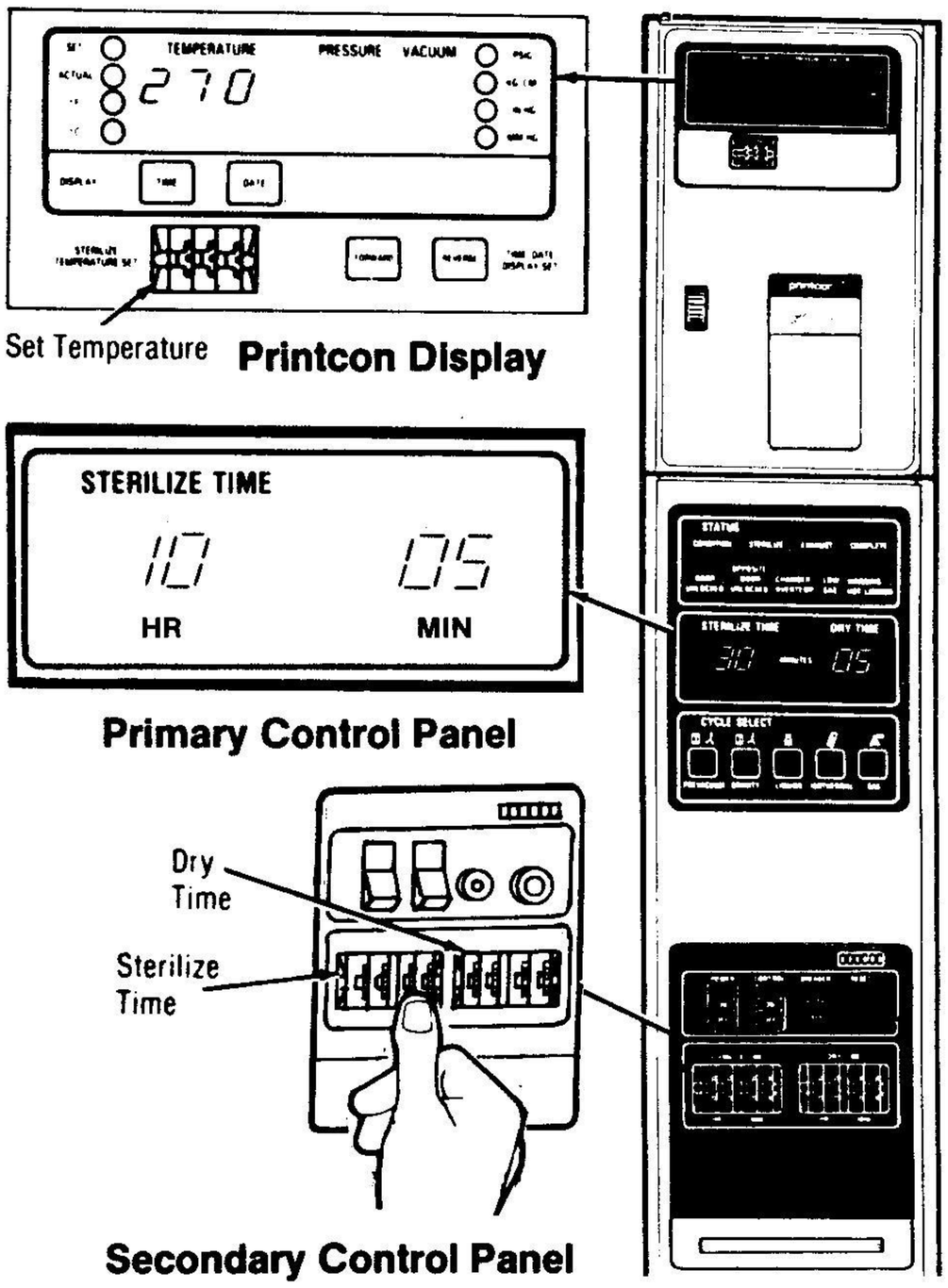
4. Using the thumbwheel switch on the Printcon unit, set the sterilize temperature to 250 F (121 C) or 270 F (132 C). This setpoint will be displayed for about 3 seconds before the chamber drain temperature is redisplayed. If selected temperature is outside the allowable range, 150-295 F (65-146 C), the buzzer sounds until an allowable temperature is selected. This temperature is locked in and cannot be changed once the cycle is started.

NOTE: Printcon is calibrated to control the temperature at approximately 3 F (1.7 C) above the thumbwheel setpoint. This overdrive feature assures effective load temperature control and provides for the shortest possible cycle time. However, for special applications, this overdrive feature is adjustable. Refer to paragraph 7.4.3, "Adjusting the Sterilize Temperature Overdrive."

5. Open chamber door and load sterilizer. The printer records the time the door is opened and prints "DOOR OPEN."

a. Power Door (if double-door unit, opposite door must be locked) — press UNLOCK/OPEN button . . . once to unlock the door, a second time to open it.

b. Manual Door — turn handwheel counterclockwise. Should the door not at first unlock, turn door wheel slightly clockwise, press the center black button, then again turn door wheel counterclockwise and open. Turn handwheel to extreme left to bring ends of holding arms inward so that they will not strike door frame when door is opened or closed.



Printcon Display

Primary Control Panel

Secondary Control Panel

TABLE 4.1 MINIMUM STERILIZATION EXPOSURE PERIOD — WRAPPED AND UNWRAPPED GOODS GRAVITY CYCLE ONLY

ITEMS	PRINTCON SETTING 250° F (121° C) MINUTES	PRINTCON SETTING 270° F (132° C) MINUTES
Dressings, wrapped in muslin or equivalent	30	15
Glassware, empty, inverted	15	3
Instruments, metal only, any number (unwrapped)	15	3
Instruments, metal, combined with suture, tubing or other porous materials (unwrapped)	20	10
Instruments, wrapped in double thickness muslin or equivalent	30	15
Linen packs (maximal size 12"x 12"x 20" maximal weight 12 (pounds)	30	—
Treatment trays, wrapped in muslin or equivalent	30	15
Utensils, unwrapped	15	3
Utensils, wrapped in muslin or equivalent	30	15

6. Close and lock the door . . . panel light DOOR UNLOCKED (also OPPOSITE DOOR UNLOCKED if applicable) must go off. Once chamber is pressurized, an integral pressure-actuated lock will prevent door from being opened.

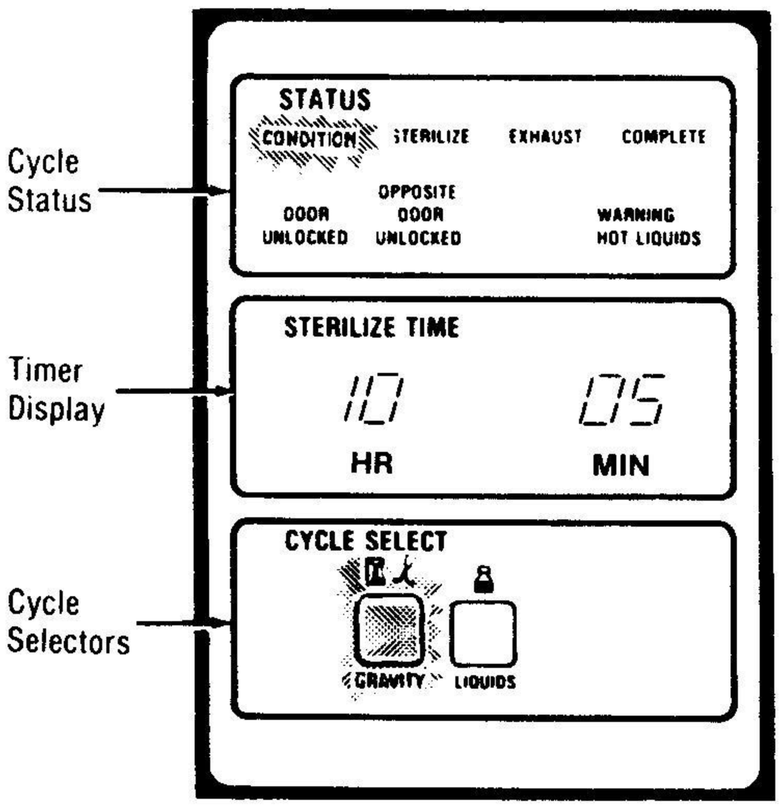
a. Power Door — press LOCK button.

b. Manual Door — turn handwheel to the right as far as it will go using normal hand pressure.

NOTE: Pressing the STOP button **during** power door operation will immediately stop the door. Refer to paragraph 4.8 if it becomes necessary to shift from power to manual operation.

7. Touch GRAVITY cycle selector. Light comes on to full brightness. Status light CONDITION comes on. The printed record will show the time the CONDITION phase begins and the temperature and pressure transition points.

NOTE: If you push the wrong cycle selector, simply press and release the RESET pushbutton on the secondary panel. Earlier selected cycle light will go out. Touch selector for correct cycle. Cycle light will come on; status light CONDITION will come on and new cycle will begin. The printer will record the time the RESET button was depressed and will print "ABORT: RESET BUTTON" on the tape. It will then record the new cycle data.



Primary Control Panel.

8. After condition phase is completed, STERILIZE light comes on and remains on for the duration of the STERILIZE phase. Steam STERILIZE TIME digital readout begins to count down when sterilizing temperature is reached. The printed record will show the time the STERILIZE phase begins and the temperature and pressure. Unit is factory set so that the printout during STERILIZE phase only includes beginning time, temperature and pressure points. This can be changed, however, so that the printing of time, temperature and pressure can be done at continuous intervals throughout STERILIZE phase. The time of interval is adjustable in 30-second increments with a total range from 30 seconds to 49 minutes, 30 seconds. This adjustment **must be** made by a qualified service technician. See paragraph 7.3.6, "Changing Sterilize Printout Intervals."

9. When sterilize timer times out, EXHAUST light comes on. Chamber exhausts to atmospheric pressure. If a drying period was selected, DRY TIME digital readout begins to count down. If zero DRY TIME was selected, cycle proceeds to next step. The printed record will show the time the EXHAUST phase begins and the temperature and pressure transition points.

10. When exhaust phase is completed, panel light COMPLETE comes on and buzzer sounds. Open chamber door (see step 5), load may be removed from the sterilizer. The printed record will show the time the cycle finished, the sterilize and dry time, and the total cycle time.

11. When chamber door is opened, controls will automatically reset and DOOR UNLOCKED light will come on. The printer records the time the door is opened and prints "DOOR OPEN."

12. If two ply paper is used in the printer, tear off duplicate record and place with the completed load.

4.3 Automatic Operation: Liquids Cycle

WARNING: TO PREVENT THE POSSIBILITY OF PERSONAL INJURY FROM BURSTING BOTTLES AND HOT FLUID, USE ONLY BOROSILICATE (PYREX) FLASKS WITH VENTED CLOSURES FOR STERILIZING LIQUIDS.

• SEE PARAGRAPHS 3.2.1 AND 3.2.2 FOR FURTHER INFORMATION.

1. Follow instructions in paragraph 4.1, "Before Operating The Equipment."

2. Open the upper access door and turn HI-LO valve to LO.

NOTE: For cycle temperatures below 250 F (121 C), refer to paragraph 4.7.

3. Open the door on the secondary control panel.

a. Be sure the POWER and CONTROL switches are ON. Primary control panel and Printcon display should be lit.

b. Set STERILIZE timer thumbwheels to appropriate time . . . see Table 4.2. Set time will be displayed on the primary control panel; however, during a LIQUIDS cycle, controller automatically disregards any DRY time setting. Once the cycle is started, the STERILIZE time will be locked in and cannot be changed.

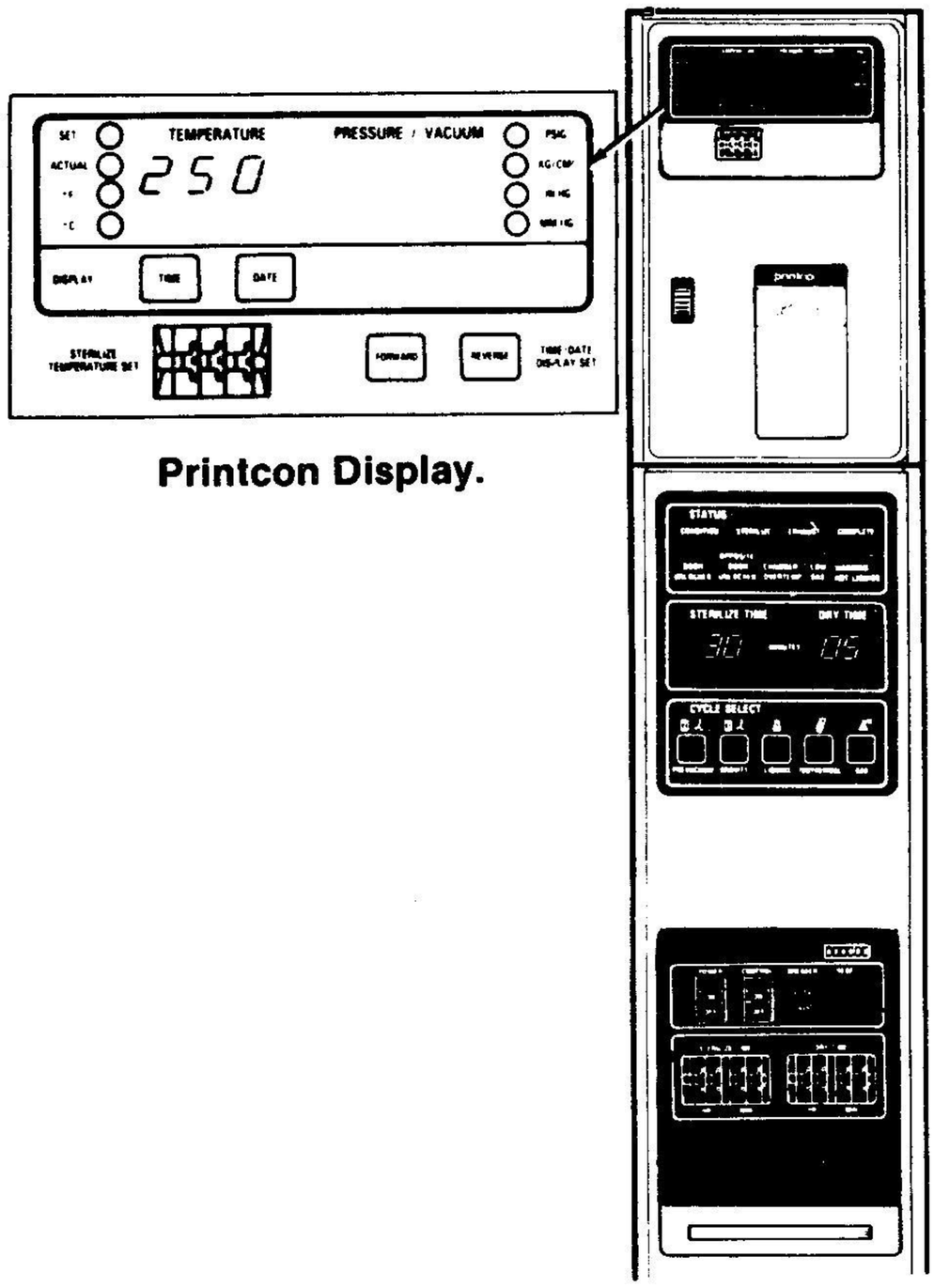
4. Using the thumbwheel switch on the Printcon unit, set the sterilize temperature to 250 F (121 C). This setpoint will be displayed for about 3 seconds before the chamber drain temperature is redisplayed. If selected temperature is outside the allowable range, 150-295 F (65-146 C), a buzzer sounds until an allowable temperature is selected. This temperature is locked in and cannot be changed once the cycle is started.

NOTE: Printcon is calibrated to control the temperature at approximately 3 F (1.7 C) above the thumbwheel setpoint. This overdrive feature assures effective load temperature control and provides for the shortest possible cycle time. However, for special applications, this overdrive feature is adjustable. Refer to paragraph 7.4.3, "Adjusting the Sterilize Temperature Overdrive."

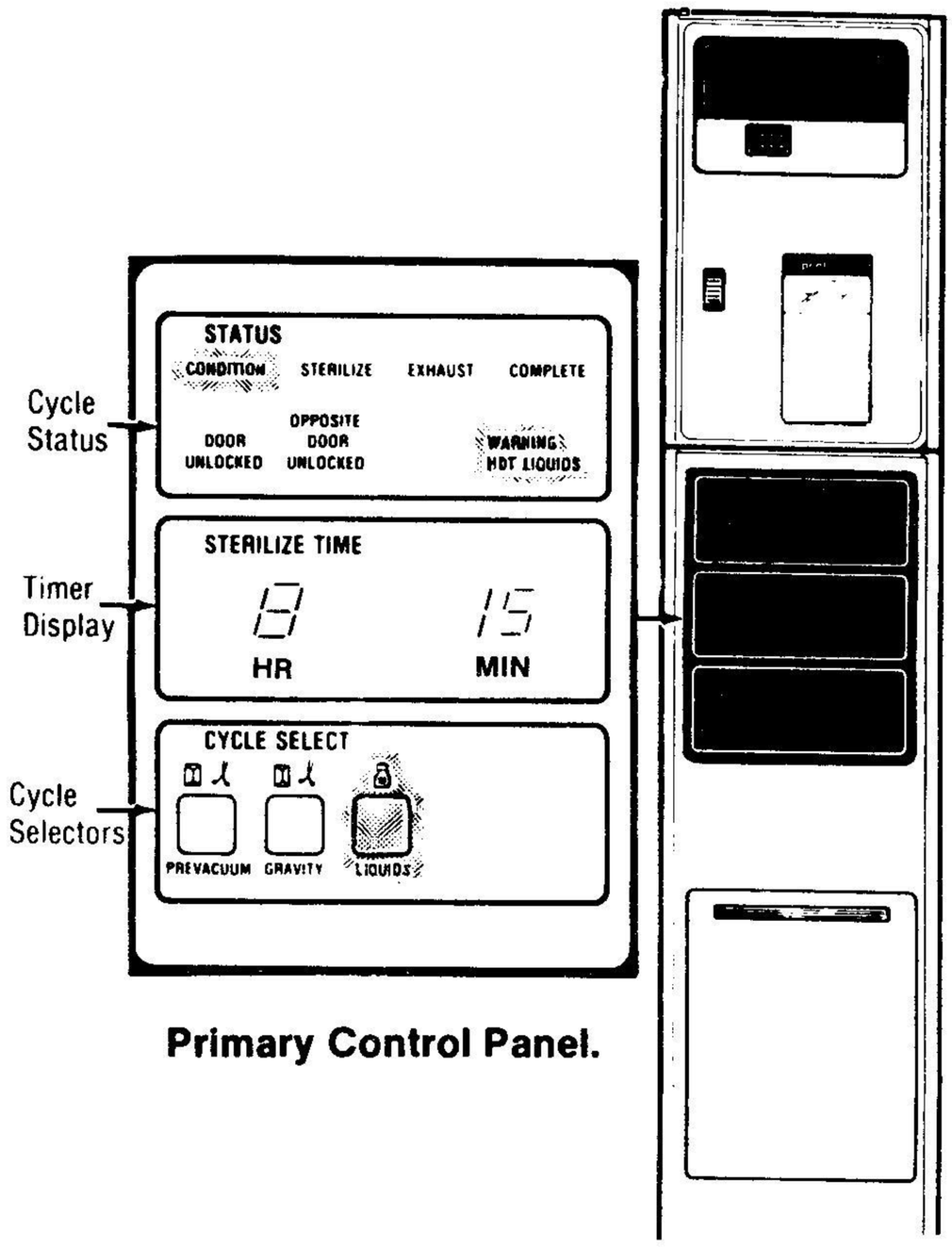
5. Open chamber door and load sterilizer. The printer records the time the door is opened and prints "DOOR OPEN."

a. Power Door (if double-door unit, opposite door must be locked) — press UNLOCK/OPEN button . . . once to unlock the door, a second time to open it.

b. Manual Door — turn handwheel counterclockwise. Should the door not at first unlock, turn door wheel slightly clockwise, press the center black button, then again turn door wheel counterclockwise and open. Turn handwheel to extreme left to bring ends of holding arms inward so that they will not strike door frame when door is opened or closed.



Printcon Display.



Primary Control Panel.

6. Close and lock the door . . . panel light DOOR UNLOCKED (also OPPOSITE DOOR UNLOCKED if applicable) must go off. Once chamber is pressurized, an integral pressure-actuated lock will prevent door from being opened.

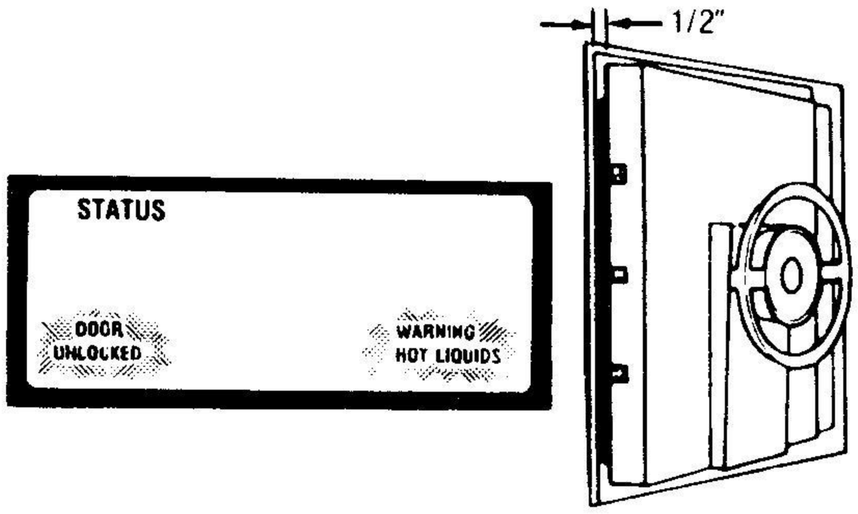
a. Power Door — press LOCK button.

b. Manual Door — turn handwheel to the right as far as it will go using normal hand pressure.

NOTE: Pressing the STOP button **during** power door operation will immediately stop the door. Refer to paragraph 4.8 if it becomes necessary to shift from power to manual operation.

7. Touch LIQUIDS cycle selector. Light comes on to full brightness. Status light CONDITION comes on; also WARNING HOT LIQUIDS light comes on. The printed record will show the time the CONDITION phase begins and the temperature and pressure transition points.

NOTE: If you push the wrong cycle selector, simply press and release the RESET pushbutton on the secondary panel. Earlier selected cycle light will go out. Touch selector for correct cycle. Cycle light will come on; status light CONDITION will come on and new cycle will begin. The printer will record the time the RESET button was depressed and will print "ABORT: RESET BUTTON" on the tape. It will then record the new cycle data.



Crack Door Following Liquids Cycle.

8. After condition phase is completed, STERILIZE light comes on and stays on for the duration of the STERILIZE phase. STERILIZE TIME digital readout begins to count down when sterilizing temperature is reached. The printed record will show the time the STERILIZE phase begins and the temperature and pressure transition points. Unit is factory set so that the printout during STERILIZE phase only includes beginning time, temperature and pressure points. This can be changed, however, so that the printing of time, temperature and pressure can be done at continuous intervals throughout STERILIZE phase. The time of interval is adjustable in 30-second increments with a total range from 30 seconds to 49 minutes, 30 seconds. This adjustment **must be** made by a qualified service technician. See paragraph 7.3.6, "Changing Sterilize Printout Intervals."

9. When sterilize timer times out, EXHAUST light comes on and chamber exhausts slowly. The printed record will show the time the EXHAUST phase begins, the temperature and pressure.

10. When exhaust phase is completed, COMPLETE light comes on and buzzer begins to sound. The printed record will show the time the cycle finished, the sterilize time, and the total cycle time.

WARNING: SUDDEN FULL OPENING OF THE DOOR FOLLOWING A STERILIZATION CYCLE COULD CAUSE LIQUIDS TO BOIL OVER OR BOTTLES TO BURST. TO PREVENT POSSIBLE PERSONAL INJURY, PROCEED AS FOLLOWS.

11. Crack the door open (see step 5) **about 1/2"** and leave it cracked for at least 10 minutes. (If a power door, press the UNLOCK/OPEN button **only once.** This will **unlock, but not open** the door.) The printer records the time the door is opened and prints "DOOR OPEN."

TABLE 4.2 MINIMUM RECOMMENDED EXPOSURE TIMES FOR FULL LOAD OF SQUARE-PAK® FLASKED SOLUTIONS 250 F (121 C) PRINTCON SETTING

ASPF SIZE	TIME (MINUTES)
75 ML	25
250 ML	30
500 ML	40
1000 ML	45
1500 ML	50
2000 ML	55

12. Unlocking the door will stop buzzer and cause DOOR UNLOCKED light to come on. WARNING HOT LIQUIDS light will remain on, but will begin to flash . . . continuing for 10 minutes. At the end of 10 minutes, buzzer will again sound and WARNING HOT LIQUIDS light will stay on, but will stop flashing.

13. Open chamber door, load may now be removed from sterilizer. Press RESET button on secondary control panel to reset control and turn WARNING HOT LIQUIDS light off. The printer records the time the RESET button is depressed and prints "ABORT: RESET BUTTON."

14. If two ply paper is used in the printer, tear off duplicate record and place with the completed load.

4.4 Manual Operation: Gravity (Wrapped or Unwrapped Goods) or Liquids Cycle

NOTE: Manual control is a feature on this sterilizer.

1. Follow steps 1, 2 and 9 in paragraph 4.1, "Before Operating The Equipment." The CONTROL switch must be positioned at OFF when using manual operation.

2. Open the upper access door.

3. Determine desired processing temperature (270 F [132 C] or 250 F [121 C] for Gravity cycle; 250 F [121 C] for Liquids cycle). See Table 4.1 or 4.2.

4. Set HI-LO valve as follows:

a. **For 250 F (121 C) operation** — refer to paragraph 4.7 for instructions on loosening front stop on pressure regulator; then turn valve counterclockwise until jacket pressure gauge reads between 15 and 18 psig (1.056 and 1.267 kg/cm²).

NOTE: If normal "LO" setting is used for manual operation, chamber temperature will be approximately 258° F (126° C).

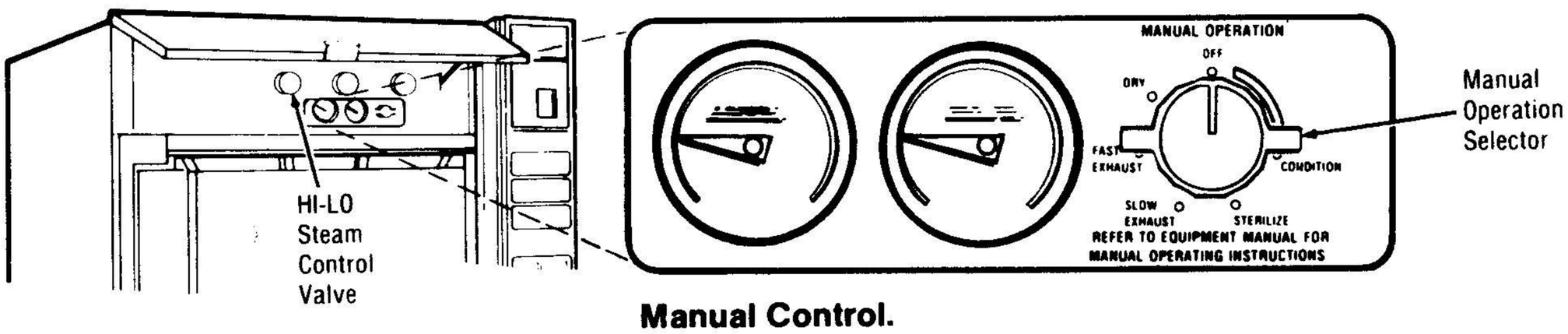
b. **For 270 F (132 C) operation** — set HI-LO valve so that jacket pressure gauge reads between 28 and 30 psig (1.971 and 2.112 kg/cm²).

WARNING: WHEN OPERATING A LIQUIDS CYCLE YOU MUST OBSERVE THE PRECAUTIONS LISTED IN PARAGRAPH 3.2. FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.

5. Open chamber door and load sterilizer.

a. Power Door — If power is available use normal procedure, otherwise follow instructions in paragraph 4.8, then proceed to step b ("Manual Door").

b. Manual Door — turn handwheel counterclockwise. Should the door not at first unlock, turn door wheel slightly clockwise, press the center black button, then again turn door wheel counterclockwise and open. Turn handwheel to extreme left to bring ends of holding arms inward so that they will not strike door frame when door is opened or closed.



Manual Control.

6. Close and lock the door . . . panel light DOOR UNLOCKED (also OPPOSITE DOOR UNLOCKED if applicable) must go off. Once chamber is pressurized, an integral pressure-actuated lock will prevent door from being opened.

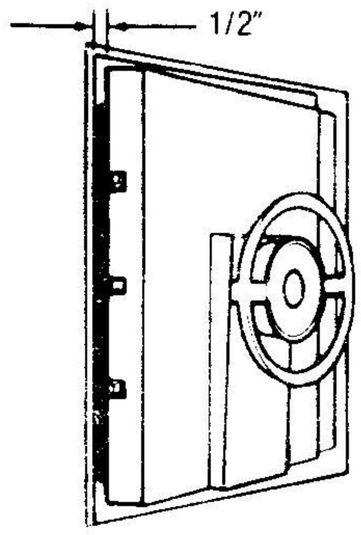
a. Power Door — If power is available use normal procedure, otherwise proceed to step b ("Manual Door").

b Manual Door — turn handwheel to the right as far as it will go using normal hand pressure.

7. Turn the Manual Operation selector to Condition and wait for sixty seconds. Proceed to step 8.

8. After Condition phase, turn selector to Sterilize. When chamber reaches desired pressure, begin timing. After correct sterilization period, proceed to next step.

Crack Door Following Liquids Cycle.



WARNING: SUDDEN FULL OPENING OF THE DOOR FOLLOWING A LIQUIDS STERILIZATION CYCLE COULD CAUSE LIQUIDS TO BOIL OVER OR BOTTLES TO BURST. TO PREVENT POSSIBLE PERSONAL INJURY, PROCEED AS FOLLOWS.

9. **If a Liquids cycle, turn selector to Slow Exhaust and keep it in this position until chamber pressure is atmospheric (0 psig).** Then turn selector to Off position, **omitting** the Dry phase. Crack the door open **about 1/2"** and wait for at least 10 minutes.

If a Gravity cycle, turn the selector to the Fast Exhaust position until chamber pressure is between 4 and 6 psig (0.28 and 0.42 kg/cm²). If the load consists of wrapped goods, turn the selector to the Dry position. Begin timing. After drying period, turn selector to Off position. If the load is unwrapped goods, turn selector directly to Off position.

10. Load may be removed from the sterilizer.

4.5 Control Monitoring and Communication Systems

To ensure the validity of the sterilizing process, the automatic control continually monitors the cycle. Should one of the following conditions occur, you will be notified as indicated.

CONDITION NO. 1: Sterilizer did not complete conditioning phase in preset time.

INDICATION: CONDITION light on primary control panel flashes, buzzer sounds intermittently and a **permanent record is printed.**

OPERATOR SHOULD:

1. Touch cycle selector to stop buzzer (sterilizer will continue to operate).

2. Refer to Section 6 "Troubleshooting" to see if problem can be determined and corrected without interrupting cycle (e.g., HI-LO valve is incorrectly set).

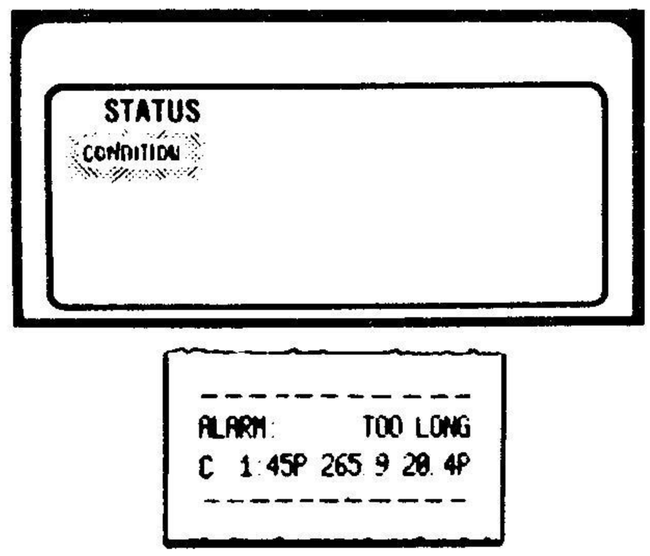
3. If problem cannot be corrected so that conditioning phase can be completed (i.e., chamber reaches set sterilizing temperature), press cycle RESET button on secondary control panel to abort cycle. **Do not** proceed further until chamber is at atmospheric pressure. The printer records the time the RESET button is depressed and prints "ABORT: RESET BUTTON."

4. When chamber is at atmospheric pressure:

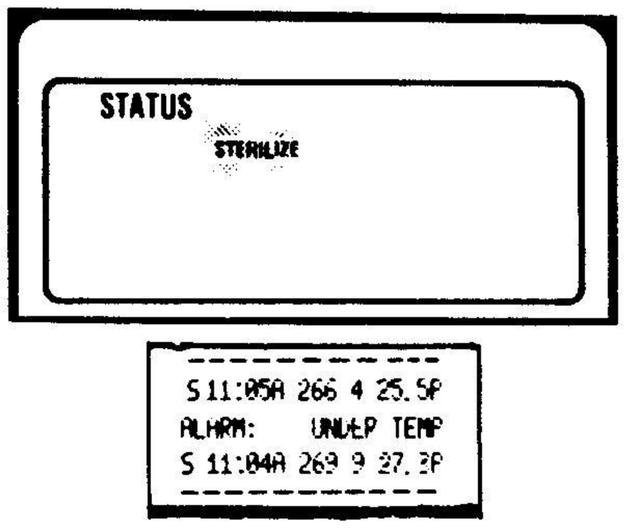
a. **If a Liquids cycle** was in progress, **crack door open 1/2"** and wait for at least 10 minutes. The printer records the time the door is opened and prints "DOOR OPEN."

b. Correct problem.

c. Reprocess load.



No. 1 — Condition Phase Too Long.



No. 2 — Sterilizing Temperature Drops.

CONDITION NO. 2: Temperature drops 2° F below set point.

INDICATION: STERILIZE light on primary control panel flashes, STERILIZE timer display resets and a **permanent record is printed.**

OPERATOR SHOULD:

1. Let cycle continue to completion if sterilizing temperature is reestablished.

2. If condition happens repeatedly, refer to Section 6 "Troubleshooting" to see if problem can be determined and corrected without interrupting cycle.

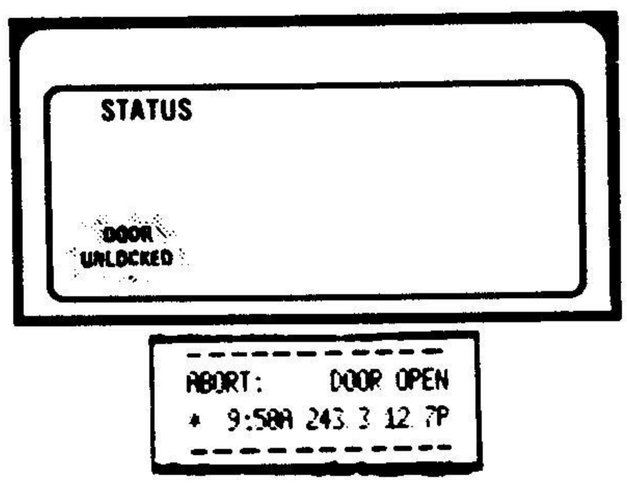
3. If problem cannot be corrected so that sterilizing phase can be completed, press cycle RESET button on secondary control panel to abort cycle. **Do not** proceed further until chamber is at atmospheric pressure. The printer records the time the RESET button is depressed and prints "ABORT: RESET BUTTON."

4. When chamber is at atmospheric pressure:

a. **If a Liquids cycle** was in progress, **crack door open 1/2"** and wait for at least 10 minutes. The printer records the time the door is opened and prints "DOOR OPEN."

b. Correct problem.

c. Reprocess load.



No. 3 — Chamber Door Switch Not Made After Cycle Has Been Started.

CONDITION NO. 3: Cycle started, but chamber door not sufficiently tightened to keep door lock switch actuated.

INDICATION: DOOR UNLOCKED light(s) on primary control panel comes on, buzzer sounds intermittently and a **permanent record is printed.**

OPERATOR SHOULD:

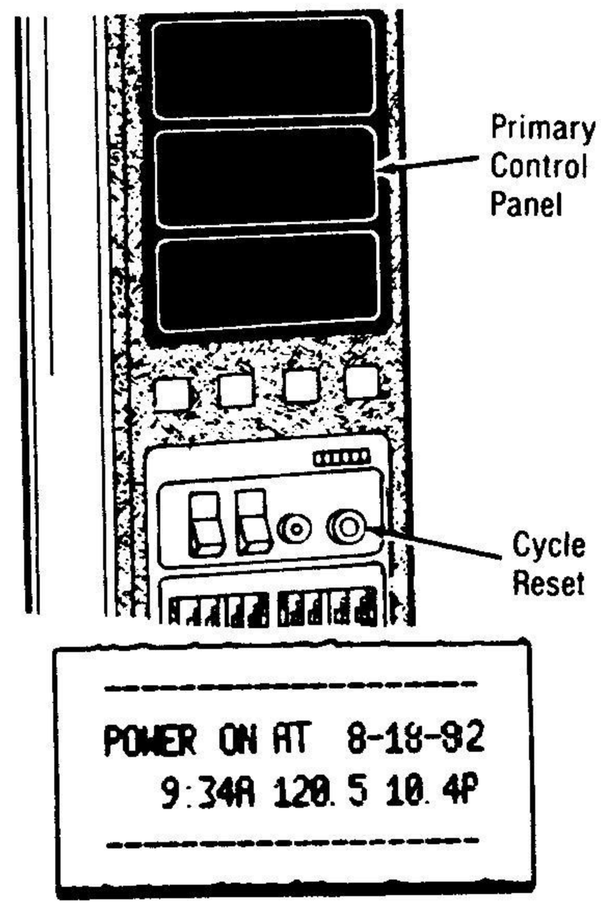
1. Press cycle RESET button on secondary control panel. **Do not** proceed further until chamber is at atmospheric pressure. The printer records the time the RESET button is depressed and prints "ABORT: RESET BUTTON."

2. When chamber is at atmospheric pressure:

a. **If a Liquids cycle** was in progress, **crack door open about 1/2"** and wait for at least 10 minutes.

b. Check door and door switch operation.

c. Reprocess load.



No. 4 — Power Restored After Power Failure.

CONDITION NO. 4: Loss of electricity.

INDICATION: Primary control panel goes dark.

OPERATOR SHOULD:

1. Wait until power is restored to sterilizer; then position CONTROL switch (on secondary control panel) to ON. Buzzer will sound intermittently and a **permanent record is printed.**

2. Press cycle RESET button, but **do not** proceed until chamber is at atmospheric pressure. The printer records the time the RESET button is depressed and prints "ABORT: RESET BUTTON."

3. When chamber is at atmospheric pressure:

a. **If a Liquids cycle** was in progress, **crack door open about 1/2"** and wait for at least 10 minutes, then reprocess load. The printer records the time the door is opened and prints "DOOR OPEN."

b. Other cycles, load may be reprocessed right away.

Additional printouts are provided whenever:

1. The RESET button is pressed.
2. The power is turned on.
3. Temperature sensor failure is detected.
4. Pressure sensor failure is detected.

4.6 Controls And Signals For Double-Door Sterilizers

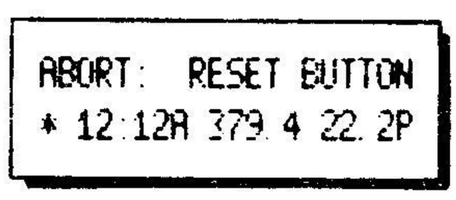
The following controls will be found on the non-operating end of the sterilizer:

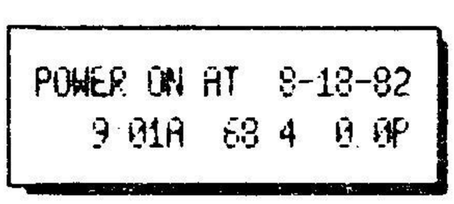
1. Cycle selectors: **GRAVITY** and **LIQUIDS.** If you wish to repeat the previous gravity or liquids cycle, and all preparatory actions (para. 4.1) have been made, you may do this from the non-operating end by touching the appropriate selector.

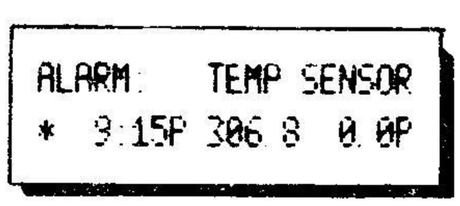
2. Status lights: These indicate the cycle phase which is currently in progress: CONDITION, STERILIZE, EXHAUST, COMPLETE.

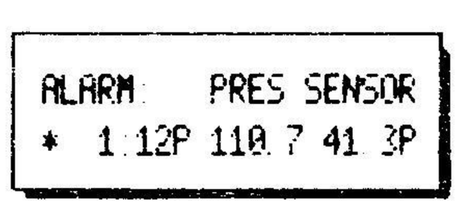
3. Warning lights: DOOR UNLOCKED, OPPOSITE DOOR UNLOCKED, WARNING HOT LIQUIDS.

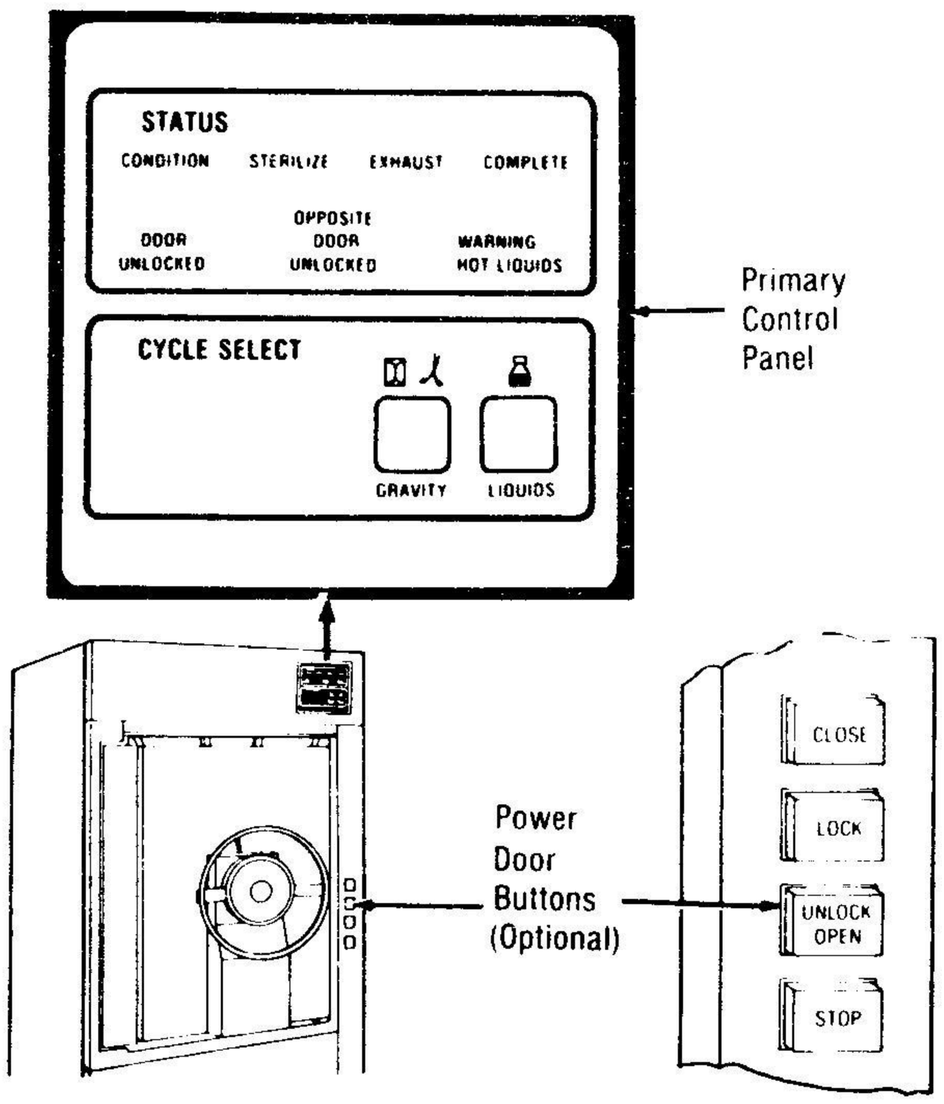
4. Power door controls (if available): CLOSE, LOCK, UNLOCK/OPEN, STOP.











Non-operating End Primary Control Panel.

4.7 Sterilization Requirements At Temperatures Below 250 F (121 C)

The HI-LO valve (steam pressure regulator on this sterilizer was factory set for 250 and 270 F (121 and 132 C) sterilization cycles. If your sterilization procedures routinely require temperature control below 250 F (121 C) . . . i.e., laboratory processes, the LO setting will have to be changed. Have your AMSCO Service Representative or an equally qualified technician from your maintenance staff make the change as follows.

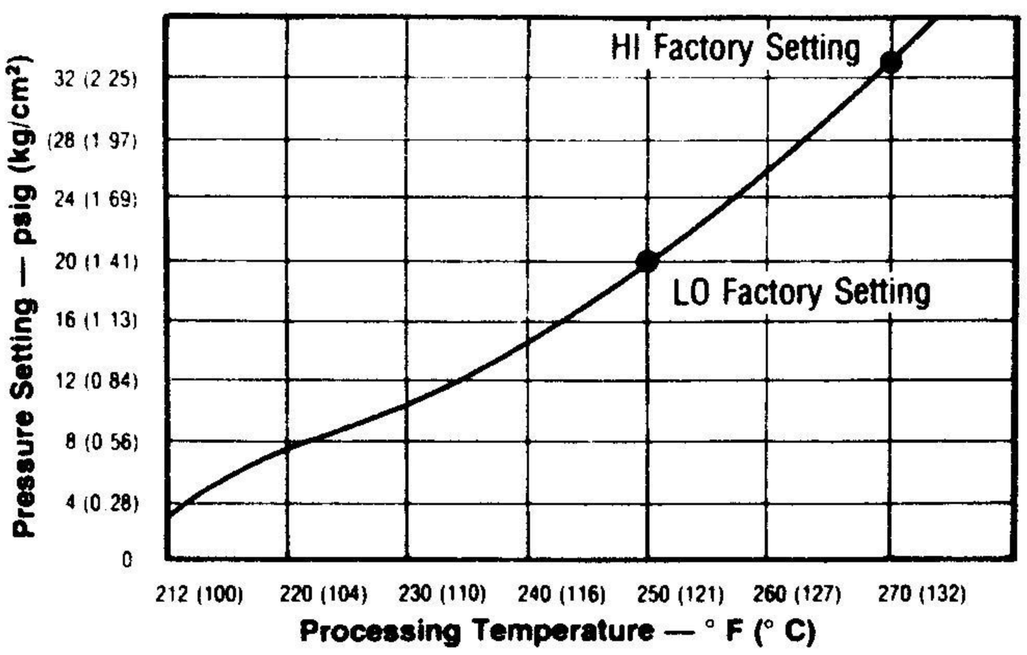
1. If a freestanding sterilizer, remove a cabinet side panel for access to the HI-LO valve; if a recessed model, proceed to the area behind the recessing wall.

2. Remove adjusting screw cover.

3. Loosen setscrew on front locknut; turn locknut until it is against the rear locknut.

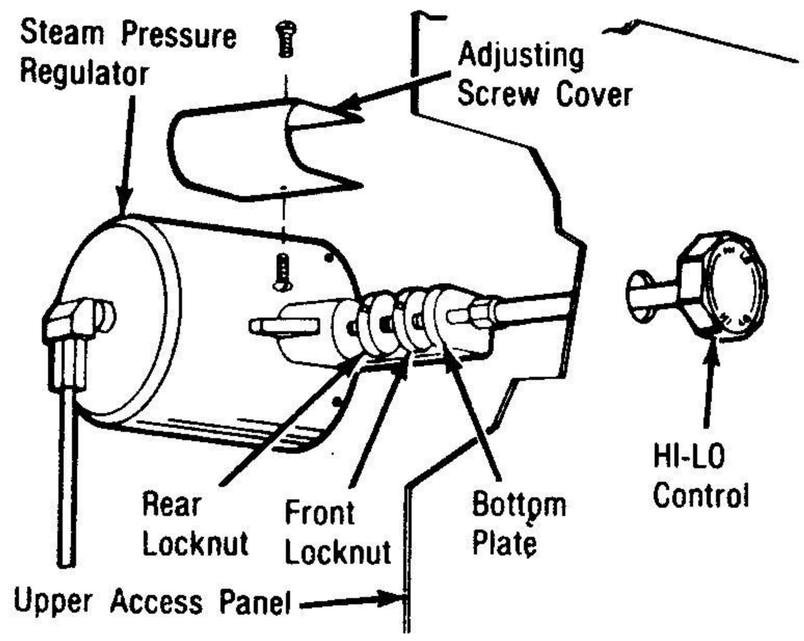
4. Follow instructions in paragraph 4.1, "Before Operating the Equipment."

5. Using the following chart, adjust the HI-LO valve until jacket pressure as indicated on the jacket pressure gauge corresponds with the desired processing temperature.



Pressure Regulator Settings.

NOTE: The jacket pressure/processing temperature relationships provided in this chart are guidelines for optimum performance of this Eagle Series sterilizer. They do not represent actual pressure/temperature ratios.



Adjusting Pressure Regulator.

6. Follow cycle instructions starting with step 3 of paragraph 4.2 if a Gravity cycle; paragraph 4.3 if a Liquids cycle, except set the sterilize temperature on Printcon for the desired processing temperature.

NOTE: Printcon is calibrated to control the temperature at approximately 3 F (1.7 C) above the thumbwheel setpoint. This overdrive feature assures effective load temperature control and provides for the shortest possible cycle time. However, for special applications, this overdrive feature is adjustable. Refer to paragraph 7.4.3, "Adjusting the Sterilize Temperature Overdrive."

7. Steps 4, 5 and 6 will have to be repeated for each new temperature. If temperature will not be changed, turn locknut on HI-LO valve until it is against the stop on the bottom plate, then tighten the setscrew.

8. Replace the adjusting screw cover and if applicable, the cabinet side panel.

4.8 Power Door Manual Operation

1. Pull shift handle to the left. If handwheel does not engage, turn it slowly while maintaining a slight pressure to the left on shift handle.

2. To return to power operation from manual, position shift handle to the right.

CAUTION: Be sure shift handle is in either the extreme right (POWER) or left (MANUAL) position at all times. Placing handle in an intermediate position could damage drive system.